L&D Inspection and Emergency Repairs Workshop

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Navigation and Operations CoP

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Navigation and Operations Community of Practice

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Anil Chaudhry	3K74	761-4133	PID/Major rehab
Mike Kidby	3I36	761-0250	Inland Nav/Charts, Uniforms
Mark Pointon	3G82	761-4258	MVD RIT/Nav, Budget
Kamau Sadiki	3I29	761-4889	Hydropower
Don Pommer	3O61	761-4709	NAD RIT/Nav, Hopper
Tom Verna	3F62	761-0036	LRD RIT/Marine Plant
Joe Wilson	3I64	761-7697	SAD RIT/Environ Regs

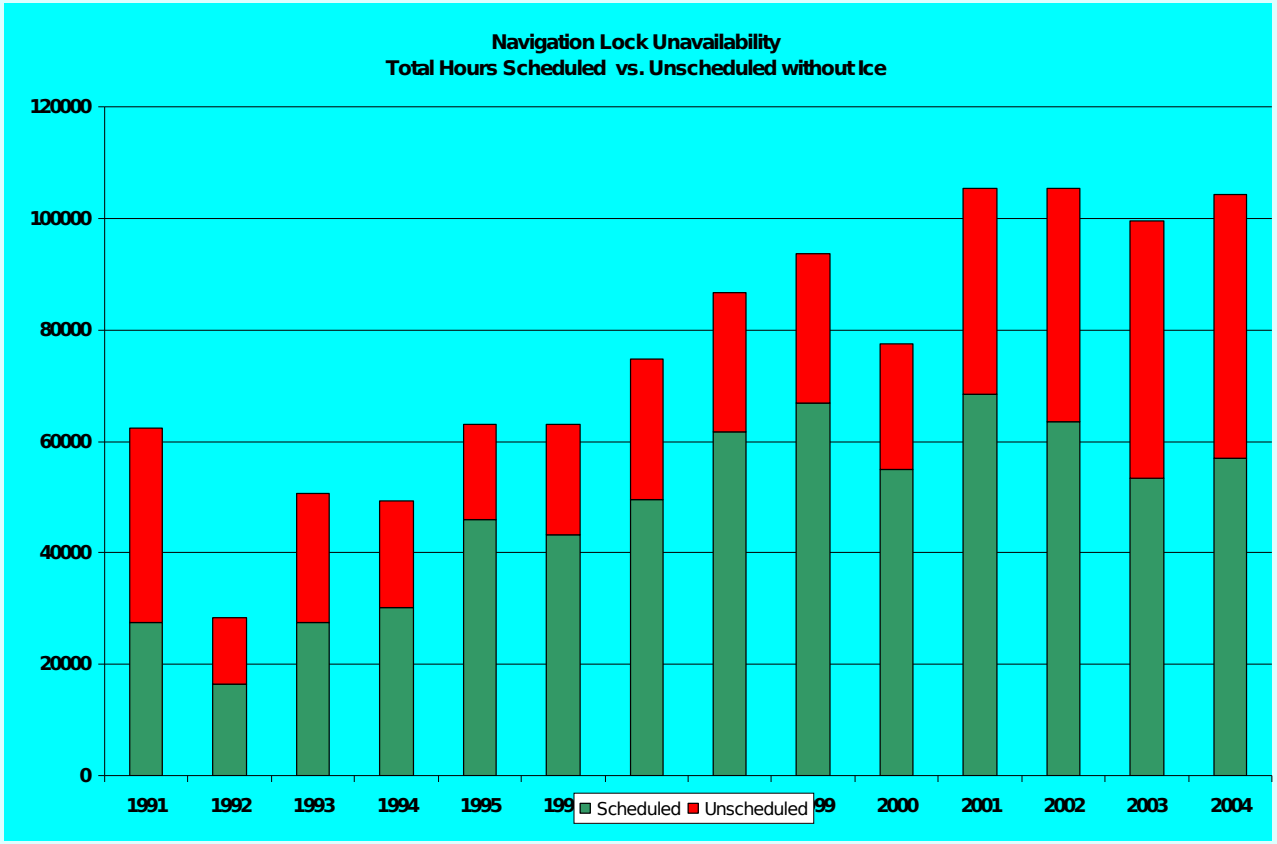
Corps Navigation Mission

Provide safe, reliable, efficient, effective and environmentally sustainable waterborne transportation systems for movement of commerce, for national security needs, and for rec

System Reliability

- **Unscheduled closures increasing**
- **Infrastructure older and more vulnerable**
- **Operational matters can impact system reliability**
- **Need for greater involvement as a team in working river management issues**

Risk and Reliability

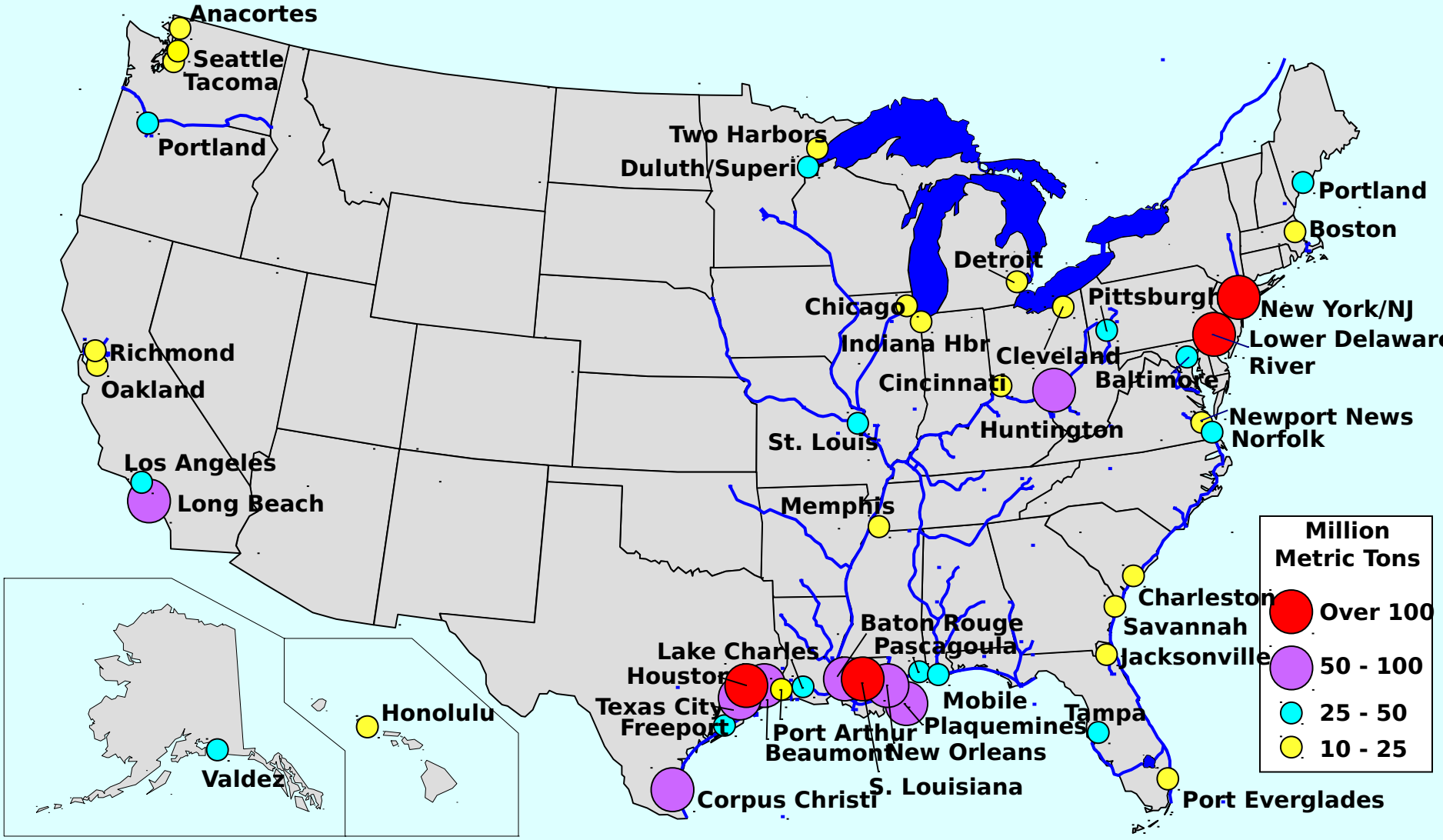


Navigation

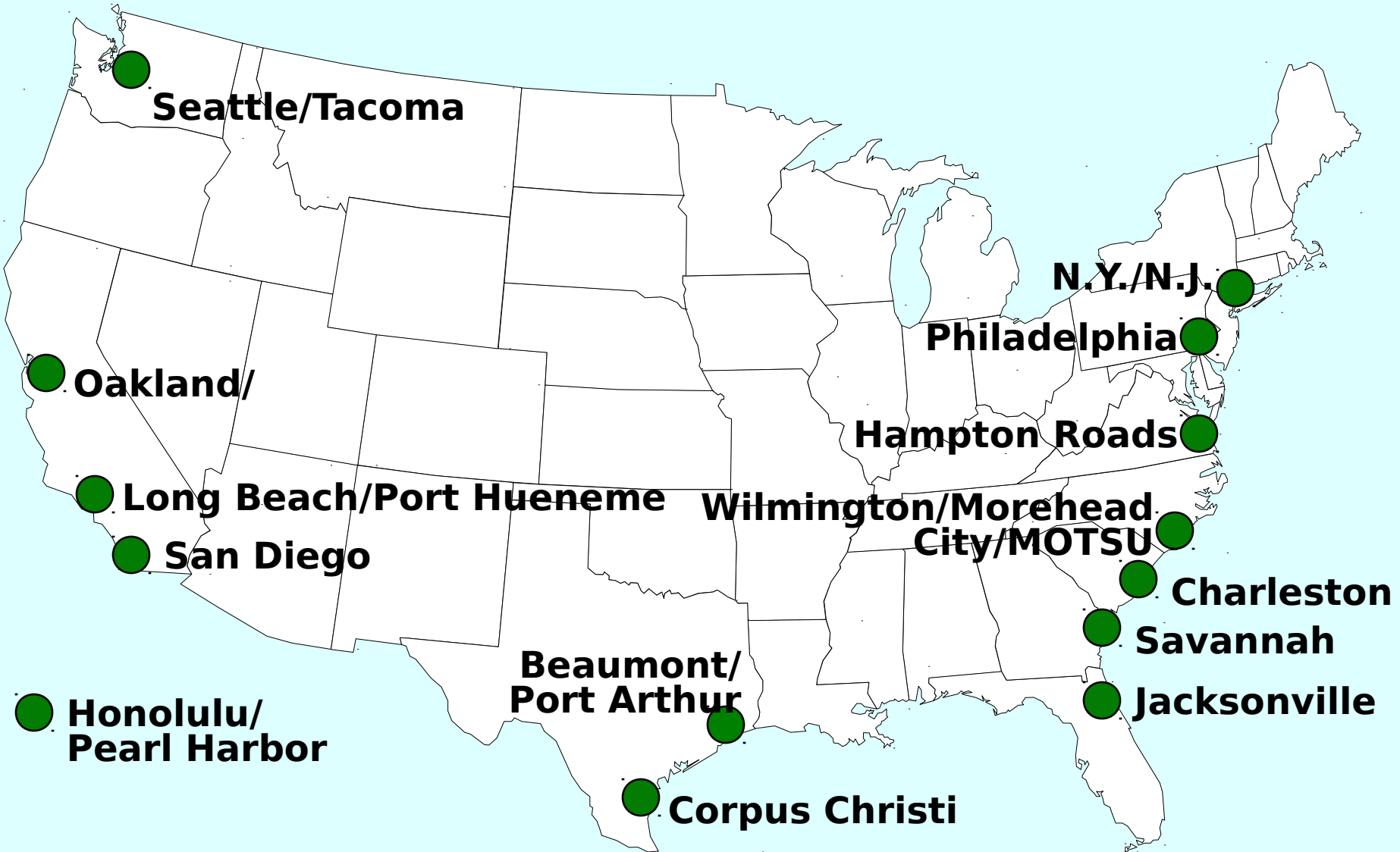
- **25,000 miles of commercially navigable channels (12,000 miles are inland/shallow draft channels)**
- **627 shallow draft, 299 deep draft harbors**
- **240 lock chambers @ 195 lock sites**
- **11 locks over 100 years old; 122 ≥ 50 years old**
- **234 million cubic yards dredged last year (new and maintenance) at a cost of $887 million**

L&D 19 UMR Spare Gates

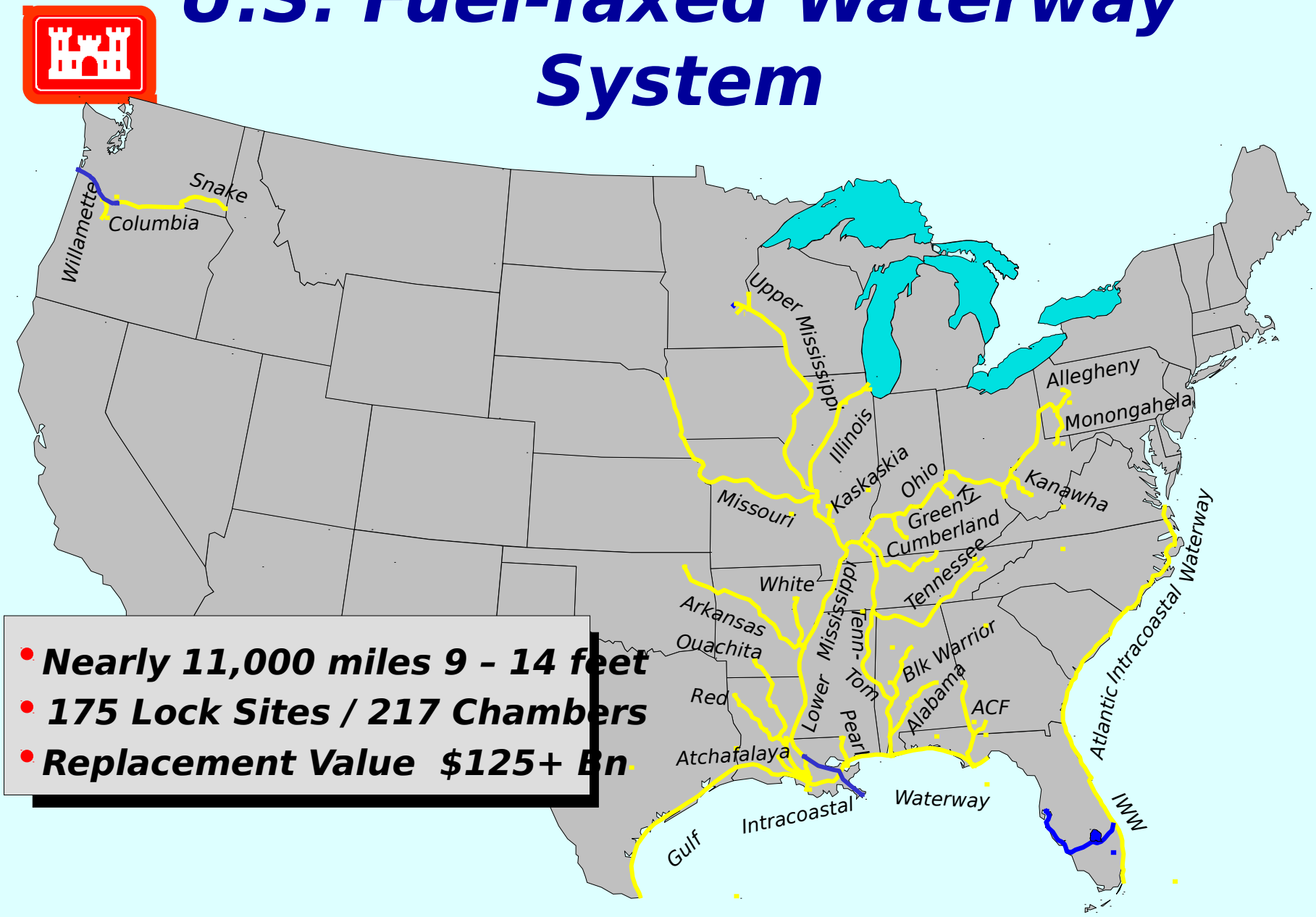
U.S. Harbors Handling over 10 Million Metric Tons in 2001



Strategic Ports



U.S. Fuel-Taxed Waterway System



- ***Nearly 11,000 miles 9 – 14 feet***
- ***175 Lock Sites / 217 Chambers***
- ***Replacement Value $125+ Bn***

Major Inland Navigation Studies

Potentially Leading to Projects Cost-Shared from IWTF

Much more work in the pipeline…but will there be support to start any of them?

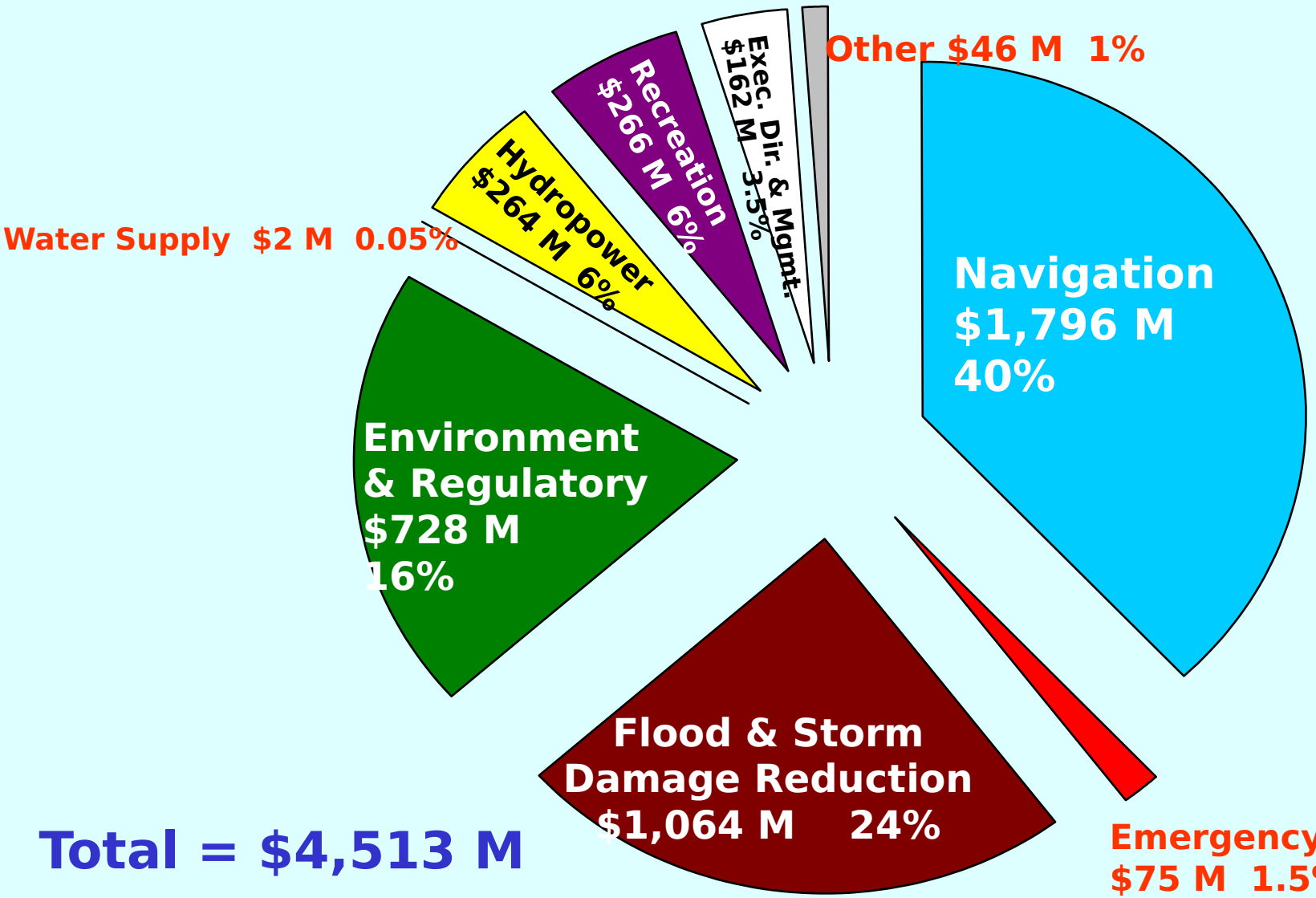
Navigation Benefits

- **2003 tonnage - 2.39 billion tons (1.38 billion tons foreign)**
- **Value of foreign tonnage - $737 billion**
- **Trust Fund Revenues generated FY 2002:**
  $108 million - Inland Waterways Trust Fund
  $711 million - Harbor Maintenance Trust Fund
- **40 million cubic yards dredged material applied to beneficial uses annually**

ISSUES OR CHALLENGES

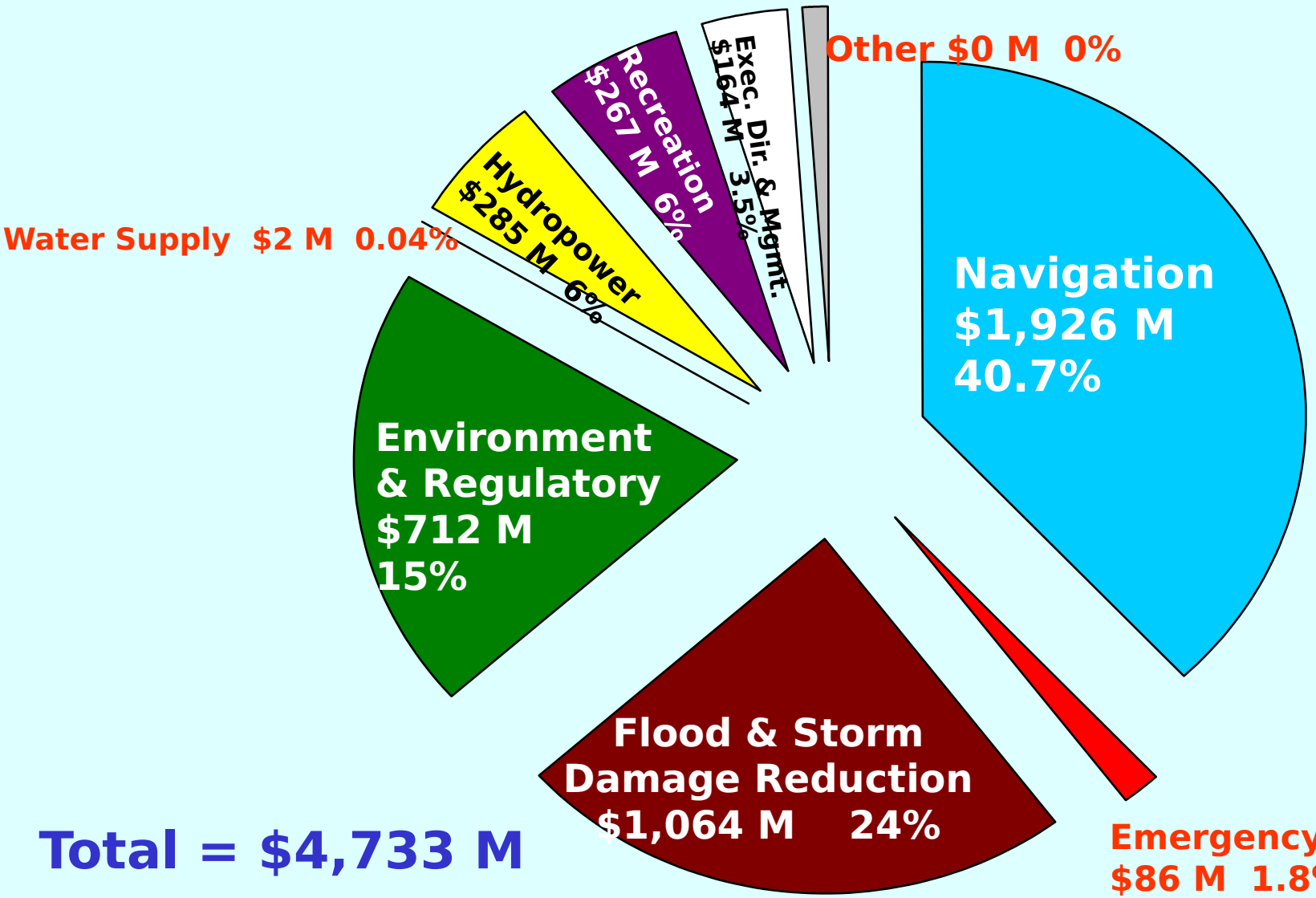
- Post 9/11 Security
- War on Terror Budget
- Aging infrastructure
- Locks nearing capacity
- Economics of O&M
- Reliability increasingly critical to stakeholders
- Need to plan and design navigation projects for maintenance
- Knowledge management & technology (KMT) critical to future success
- KMT must drive active, systemic, consistent approach to collaboration
- Environmental windows increasingly impacting navigation

FY 06 Budget by Business Line


Other $46 M 1%
Exec. Dir. & Mgmt. $162 M 3.5%
Recreation $266 M 6%
Hydropower $264 M 6%
Water Supply $2 M 0.05%
Navigation $1,796 M 40%
Environment & Regulatory $728 M 16%
Flood & Storm Damage Reduction $1,064 M 24%
Emergency Management $75 M 1.5%

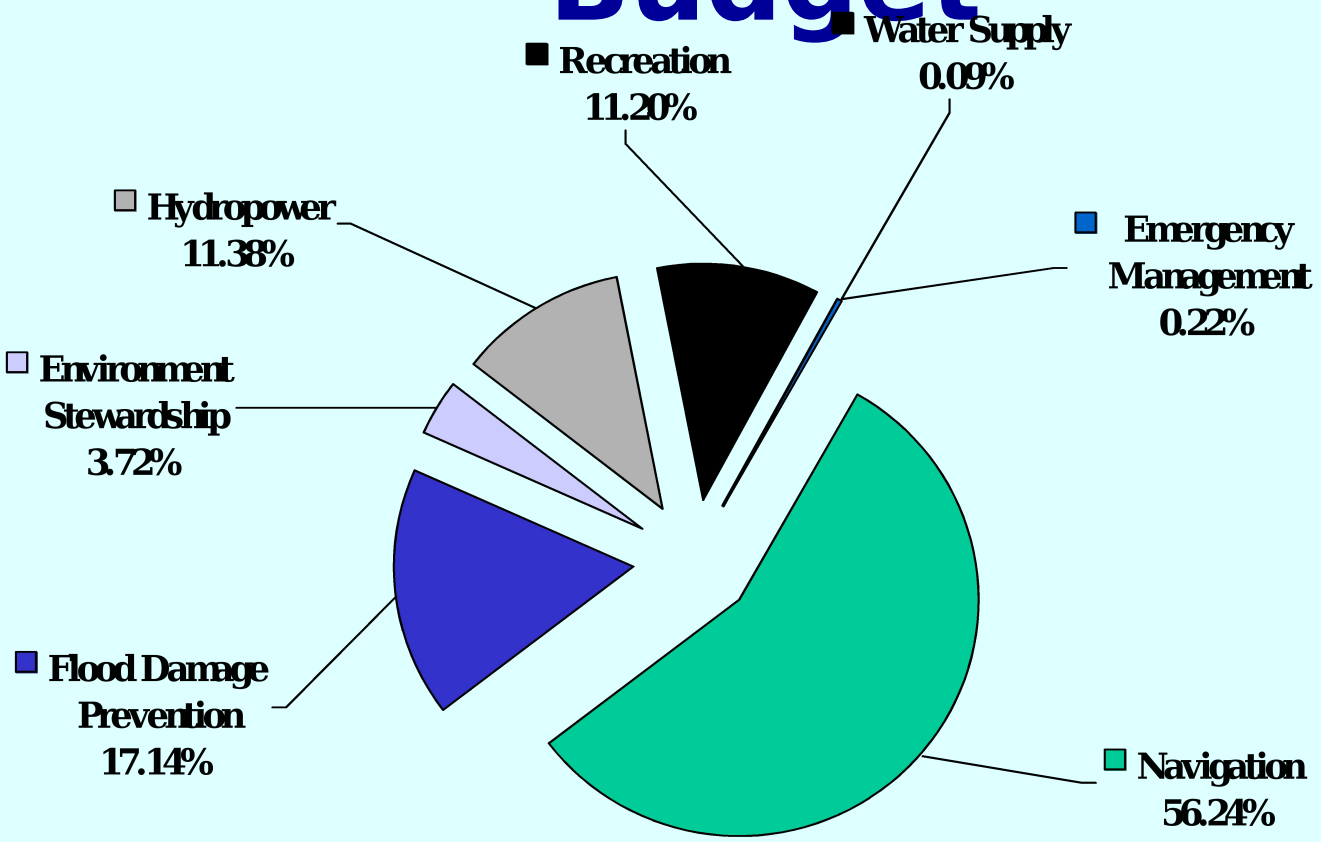
Total = $4,513 M

FY 07 Budget by Business Line


Other $0 M 0%
Recreation $267 M 6%
Exec. Dir. & Mgmt. $164 M 3.5%
Hydropower $285 M 6%
Water Supply $2 M 0.04%
Navigation $1,926 M 40.7%
Environment & Regulatory $712 M 15%
Flood & Storm Damage Reduction $1,064 M 24%
Emergency Management $86 M 1.8%

Total = $4,733 M

O&M Business Functions FY 2007 President's Budget



Total $2,258 B

NAVIGATION O&M BUDGET

Navigation Segment	FY04 Budget	Conference	FY 05 Budget
		(thousands	
Deep Draft	506,198	517,823	539,484
Shallow Draft	22, 981	57,047	28,222
IWW > 5 billion ton-miles	- -	316,877	327,514
IWW < 5 billion ton-miles	(481,089)	110,179	83,818
IWW < 1 billion ton-miles	- -	67,825	49,321
Total Navigation	$1,010,268	$1,069,751	$1,028,359

TRENDS - SHIPS

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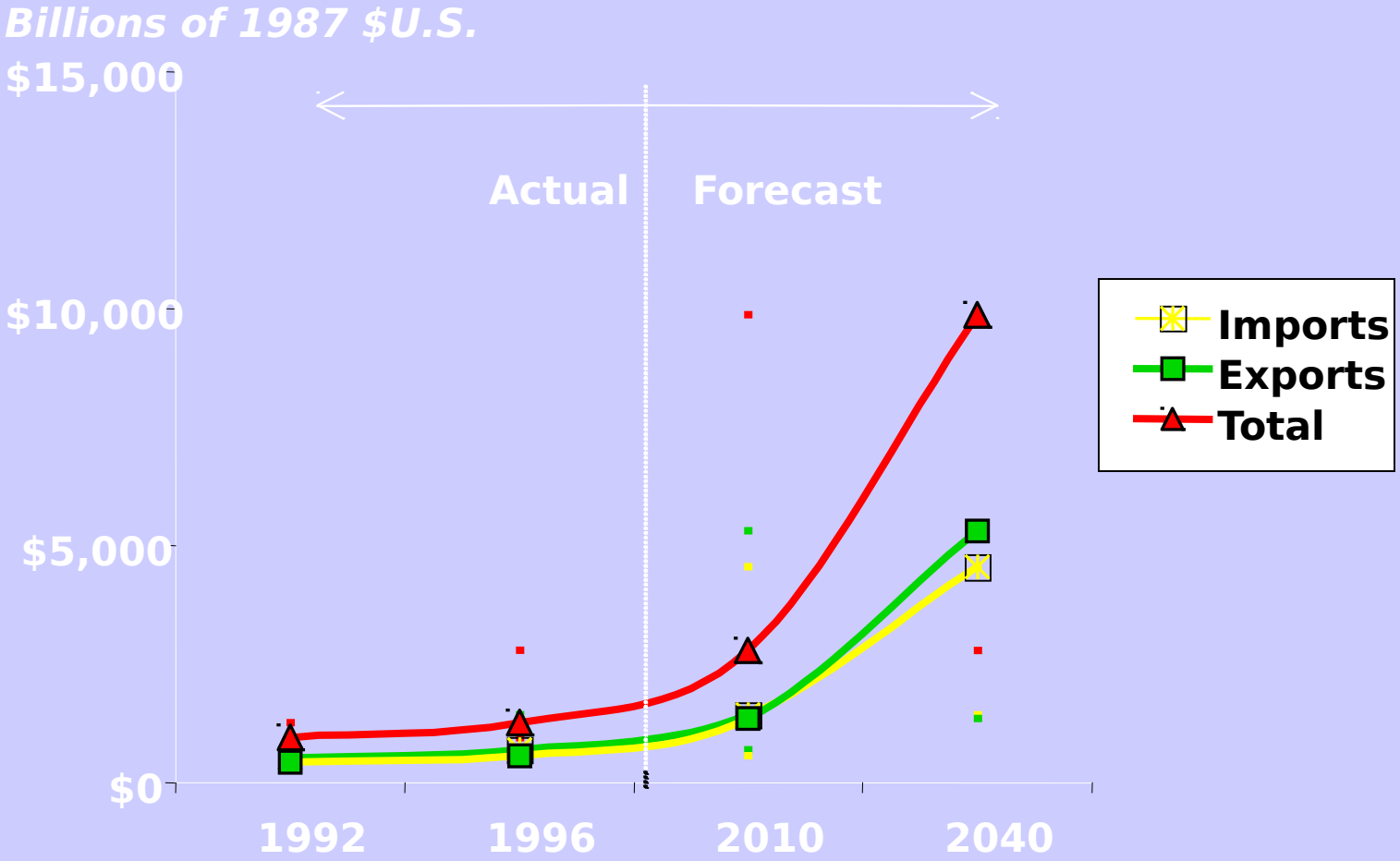
The future mode

?

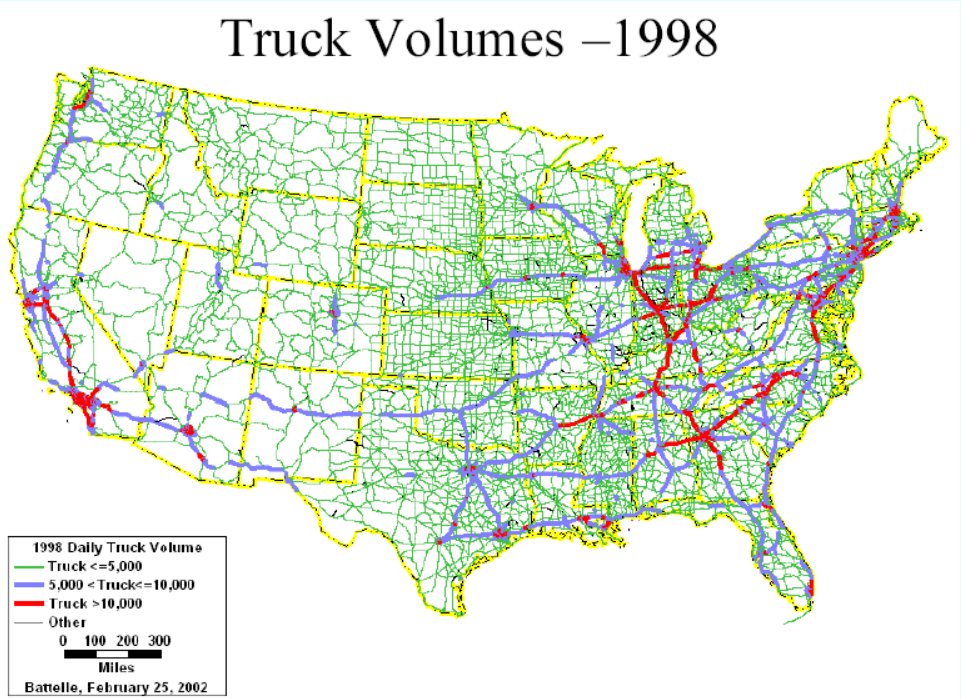
Challenge - Outlook for Increased Trade

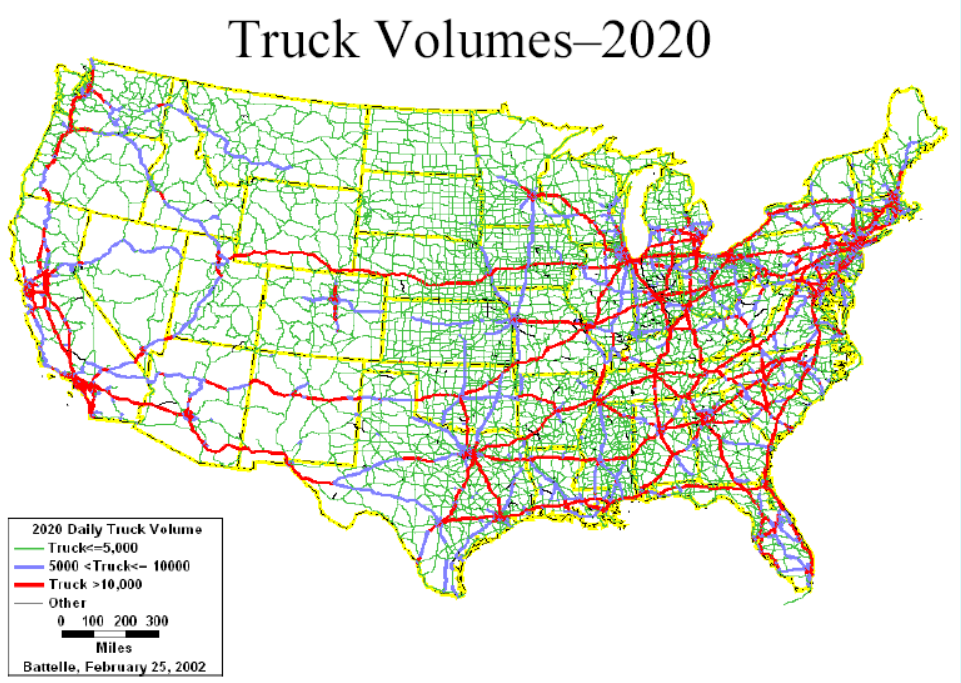


U.S. International Trade 1992 - 2040

Future Freight Demand

- Freight traffic expected to increase by 67%
- General cargo freight by 113%
- Highway traffic grows from 11 billion to 19 billion tons (17.2 billion metric tons)
- Rail grows from 2 to 3.7 billion tons (3.4 billion metric tons)
- How is this cargo going to move?
  - Little room left to expand highways, especially in urban areas
  - Rail mileage has been decreasing; much former right-of-way has been developed
  - Rail capacity constraints in urban areas, tunnel clearances, single-track bridges





SEEKING SOLUTIONS

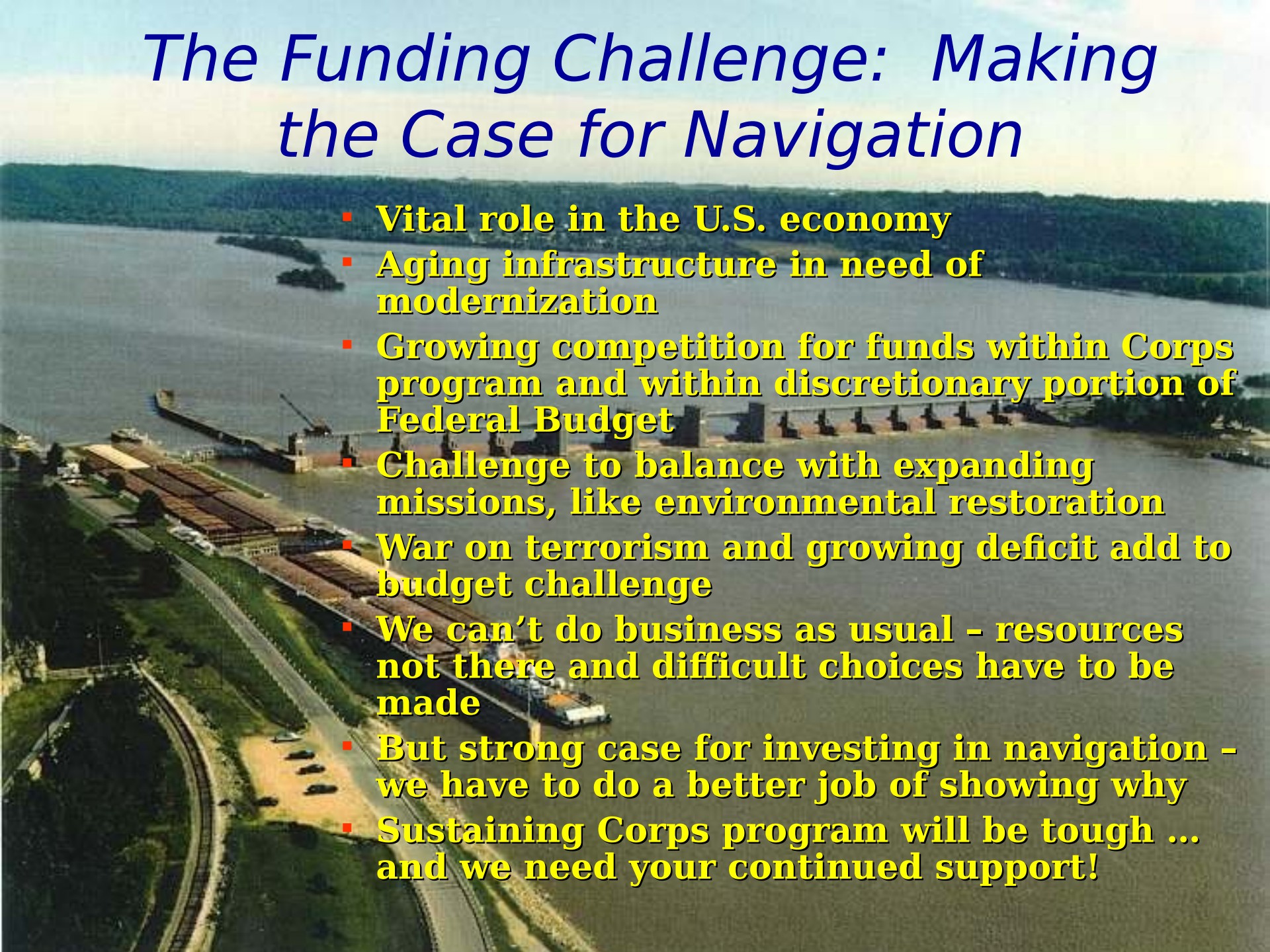
- **Adopt risk & reliability as an approach to budget development & system management**
- **Work closely with navigation industry and ERDC on existing & new technologies**
- **Bench mark against national and world class systems**
- **Promptly report incidents & accidents per ER 1130-2-520, Chap. 2**

BOOKMARKS

- **Navigation Gateway: http://navigation.usace.army.mil/**
- **Navigation education: http://education.wes.army.mil/navigation/navigate.html**
- **Navigation Data Center: http://www.iwr.usace.army.mil/ndc/**
- **Navigation Information Connection: http://www.mvr.usace.army.mil/navdata/**
- ***America's Inland Waterways System* Video**

  http://www.usace.army.mil/inet/functions/cw/cecwo/index.html/

The Funding Challenge: Making the Case for Navigation



- **Vital role in the U.S. economy**
- **Aging infrastructure in need of modernization**
- **Growing competition for funds within Corps program and within discretionary portion of Federal Budget**
- **Challenge to balance with expanding missions, like environmental restoration**
- **War on terrorism and growing deficit add to budget challenge**
- **We can't do business as usual – resources not there and difficult choices have to be made**
- **But strong case for investing in navigation – we have to do a better job of showing why**
- **Sustaining Corps program will be tough … and we need your continued support!**

Barry Holliday's (ret) favorite saying: